



Cold Climate Housing Research Center

CCHRC

**Fairbanks Nonprofit Retrofit Pilot
December 31, 2015**

Pilot Goals & Progress

1. To demonstrate bundling of contracts and efforts for audits, financing, construction, recommissioning, and monitoring.

- We have collected information relating to potential savings by bundling auditor contracts for single, multiple and selectively bundled building audits.
- We have identified a few general and mechanical contractors that regularly participate in energy performance contracting projects who can do construction at cost of materials and labor, increasing ROI and SIR values by lowering investment costs.
- As the pilot project advances, we will evaluate potential benefits of bundling the financing, construction, recommissioning, and monitoring contracts.

2. To demonstrate whether energy audits are a good predictor of cost savings. To date, there is limited documentation on commercial scale energy audit results.

- The auditing process finished in early 2015. Nonprofit participants are choosing which recommended retrofits to undertake in coming months. Some have decided to opt out of financing for organizational reasons. Once retrofits have been implemented we plan to review post-retrofit energy bills in 2016 as a general proxy for change in energy performance. We have submitted a scope of work and budget for 2016 which will provide more detail on how we plan to evaluate the goal. In the next quarter we will revise these documents with input from funders.
- Auditors, based on past experience in the industry, have different expectations about how projects develop from audit to implementation. One of the reasons little information exists about the energy savings accuracy of commercial energy audits is because few of the recommendations have been undertaken and there is relatively little feedback from end users over time.

- The last phase of this project will evaluate energy use in 2016 to see if it matches the audit predictions.

3. Test the theories and models in Fairbanks, Alaska where a successful outcome is expected and the margin for error is forgiving since the heat demand is so great. The opportunity for achieving cost savings is more likely than in more moderate temperate zones.

- In progress. A draft report on project outcomes was completed in this quarter and submitted to external and internal review in November. The report will be revised and completed next quarter.

4. If successful in Fairbanks, identify lessons learned from the pilot, which could be deployed to other rural Alaska communities.

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Additional Partner Goals

1. Evaluate the potential to transition from a grant-funded model of financing energy efficiency retrofits in the nonprofit sector to a finance-funded model.

- All of the nonprofit participants in the pilot project have received their energy audits. Based on the information contained in the audit, 3rd party cost estimates and contractor bids, nonprofits board members will decide whether to pursue financing for the recommended EEMs. CCHRC will learn from the nonprofits what considerations they had when deciding whether to pursue financing. This should elucidate considerations for transitioning (at least in part) from grant funding to financing of energy efficiency retrofits. Results from interviews with the nonprofits are included in the interim report.
- The first (and likely the only) pilot EEM recommendation considered for finance is a boiler replacement at Fairbanks Resource Agency. Currently, the FRA board has approved the corporate resolution to borrow, construction is underway and the loan has been underwritten.

2. Evaluate the importance of filling capacity gaps in the nonprofit sector (and other sectors) as a means of effectuating energy efficiency retrofits through a finance-funded model.

- Gaps discovered with interviews with the nonprofits are documented in the interim report.

Progress Report

- All of the audits have been completed. All tier I audits resulted in tier II audits.
- Vanessa Stevens has interviewed project participants for the interim report. Follow-up interviews on building retrofits and energy savings will be completed in 2016.
- The FNRP coordinator has been working through a stewardship and communications plan to assure each nonprofit has a full understanding of the pilot expectations and services through the end of the year and post-pilot project.
- Danny Powers testified on behalf of the pilot project at the request of Representative Kreiss-Tompkins request for HB58 during the Energy and Labor & Commerce committees.
- Achieving board approval during the loan process can be lengthy. We have collected competitive bids for EEM recommendations and found that great care is required to compare quotes and prepare board members for decision-making.
- FNRP has developed a decision matrix with all of the projects ranked based on their feasibility from a construction, cost and board willingness.
- RCAC and the Rasmuson Foundation have been working to determine whether deferred maintenance and depreciation categories under State and Federal grants can be used as source of repayment for energy efficiency loans.
- RCAC has moved the some FNRP lending funds into general loan accounts to leverage the underemployed money in other programs.
- Carol Brice Center considered partial finance in exchange for a design grant, however an agreement was not finalized.
- A cost estimate for an envelope rewrap of the Carol Brice Center was contracted to determine the feasibility factors. Project cost was too great for the project to be undertaken exclusively through RCAC. The project was not 'considered' practical without a grant because cash-flow positive repayment from energy efficiency savings would take well beyond the 10 years.
- Footage for a brief two minute video about the pilot origins, needs, partnerships, goals, methods and participants has been collected by communications lead Molly Rettig.
- Johnson River Enterprises continues to provide project development support.
- Statewide nonprofits continue to contact the pilot about energy efficiency opportunities.
- Peter Beardsley, with Nortech Engineering, Inc., has discussed the need for a new energy auditing product. Mr. Beardsley offered to help FNRP and collaborate to inform the interim and final reports.
- Major Milestones for the fourth quarter of 2015 included:
 - Draft interim report completed and submitted to internal and external review.
 - Revisions begun on interim report.
 - Draft scope of work and budget completed and submitted to Rasmuson Foundation and Denali Commission.
- Milestones for the fourth quarter of 2015 will include:

- Finalizing and publishing the interim report.
- Finalizing the 2016 scope of work and budget.
- Beginning tasks in 2016 scope of work.